Friday, September 20, 2024

Dear USFS,

I grew up hiking in the Pacific Northwest with my family. The beauty of the forest is so important to me. I went to college in California, and when I would come back to Oregon and see more clearcuts, I was dismayed and disheartened. Later I learned more about the science of it. Old growth trees and complex old growth ecosystems are irreplaceable (especially in primary forests that have never been damaged by logging). They support our water supply and generate fertile, stable soils; they support habitat and biodiversity; they help cool our local climate and stabilize our global climate, and they foster precipitation, which is vital. Studies have shown that large old growth trees continue to sequester more carbon than young trees, and the soils also store great amounts of carbon, which can get emitted if the land is logged and disturbed.

I call on the USFS to protect old-growth trees and forests on federal land from commercial logging. I also call on the USFS to enhance the protections for mature, future old-growth forests on federal lands. Here are a few requests:

1) Please re-examine the data used to conclude that fire poses the biggest danger to US old growth forests. Most importantly, when people looked at the data, did they differentiate between land that had been post-fire salvage logged vs. land that had been burnt by fire? If an old growth forest was post-fire salvage logged, and was therefore degraded from an "old growth" status to something else, this disturbance should be counted as "logging," not fire. Many old growth forests on the west coast have a history of burning, and they regenerate naturally, if given enough time. Post fire, they can still retain many of the important characteristics they had previously, including their soil and other aspects that will support a thriving naturally regenerating forest. If they are post-fire salvage logged, they are not given a chance. If you post-fire salvage-log a forest, you create dry, unshaded and disturbed conditions that are much more vulnerable to climate change, and which hamper resilient regrowth.

2) Please stop commercial logging of old growth trees in any forest type, on federal land. In other words, please stop selling old growth trees for money on federal lands, and stop the commercial exchange of old growth trees on federal lands. These trees are worth more standing. Old growth trees are more valuable to our nation in the forest, rather than being harvested for relatively short term purposes. If left in the forest, old, large trees continue to store and sequester more carbon than young, smaller trees. Studies have shown that harvested trees maintain very little of their carbon, in contrast to previous assumptions. Research has shown that old, large trees on the west coast maintain much of their carbon after forest fires, and they provide important post-fire habitat. See Harmon, Hanson and Dellasala:

<u>https://www.registerguard.com/story/news/environment/2022/03/14/carbon-stays-large-trees-wil</u> <u>dfires-forests-study-oregon-state-university/65344952007/</u>. Old growth trees can also help with the continued natural regeneration of the surrounding land, even if there is a disturbance such as fire. Allowing these trees to be logged for money creates an incentive towards logging these trees. Other ways to fund USFS must be created, besides the logging of old growth trees, which could impoverish our nation long term. Historical research by John Perlin has shown that nations that destroy their forests through logging may eventually experience devastating economic and social consequences. Surely enough timber can be procured to meet human needs by logging plantations and other forests that have already been degraded by logging, rather than continuing to log old growth trees on federal land.

3) Hand in hand with this, please exclude old growth trees from the timber harvest target for federal lands. Counting old growth trees towards the USFS and BLM timber harvest targets creates an incentive towards logging old growth trees.

4) Please stop post-fire salvage logging of old growth trees and old growth forests on federal land on the west coast of North America. First, some of these trees may still be alive, and may grow green tops back even after severe fire. Second, retaining these trees and snags can help preserve essential qualities of the old growth forest. If these trees and snags stay, they can provide habitat and continue to store carbon while natural regrowth happens around them, beautifully. In fire-adapted ecosystems, natural regrowth typically happens (as long as post-fire salvage logging does not occur). These post-fire old growth trees and old growth forests must not be given up on too soon. Patience is required. Here is a quote from Dr. Jerry Franklin in Seattle Times article, ""It's going to take 30 years before you begin to get significant tree canopy closure," Franklin said. "We will have an incredible diversity of plant life here, which means we will have an incredible diversity of foods. … It's going to be a buffet."

https://www.seattletimes.com/seattle-news/environment/in-a-changing-climate-will-fire-make-a-b igger-run-in-washingtons-west-side-forests/ If a forest-land is still a "moonscape" many years after a fire, it is often because it was post-fire salvage-logged, and sprayed with glyphosate, not because of the fire. Third, research has shown that large snags left standing in the forest are *not* more flammable. Post-fire salvage logging leaves burn piles, refuse and other fine fuels that are much more flammable than large snags that are left standing.

5) Please altogether stop any logging of any trees in "moist" old growth forests on federal land, including those in the PNW west of the Cascades, especially coastal forests. Many old growth forests do not respond to logging well, even if it is done for "treatment" reasons (especially those in the Pacific Northwest, west of the Cascades). Logging can harm these forests and change their nature, with little gain. See comments and research from Dr. Jerry Franklin and others. The previously mentioned Seattle Times article said, "But Franklin says it would not make much sense to transfer the east-side strategies of thinning forests to these wetter lands west of the Cascades....wetter forests, such as the stand torched in the Norse Peak blaze, have a very different relationship with fire. They burn infrequently but the toll on the trees often is severe. Trying to head off these fires would require thinning these public lands every decade or so, and that would change the natural character of these lands in what Franklin calls a "fool's exercise." There also are benefits to these west-side fires, which Franklin says can act as powerful sources of forest renewal." In some forest types, logging can create dryness and even make the land more flammable. See recent research by Millikin that shows that PNW coastal forests don't respond well to thinning, partially because it drys them out. https://www.richmond-news.com/bc-news/fuel-thinning-compromises-coastal-forests-natural-fire

<u>-resilience-whistler-ecologist-9378786</u>. To protect communities from fire, it has proven to be more effective to provide escape routes, harden homes, and create defensible space near homes, rather than logging far out in the forest, far away from homes and structures. Research from Dr. Beverly Law has also stated the huge importance of Pacific Northwest forests from a carbon storage and sequestration perspective. She said, "Broad-scale thinning to reduce severity results in more carbon emissions than would be released by fire, creating a multi-decade carbon deficit that conflicts with climate goals."

https://www.congress.gov/117/meeting/house/112540/witnesses/HHRG-117-II10-Wstate-LawB-20210429.pdf Part of the issue is that when you thin a forest, you do not know where the fire will land. So you will end up thinning forests that may never burn, harming ecosystems and emitting carbon in the meantime.

6) Beyond this, ideally there would not be commercial logging (or any commercial exchange for money) of any trees in any old growth forest on federal land. I understand this would be an even larger departure from policy than my other requests, because the USFS and BLM gain money from this practice. However, there are so few old growth forests left, and the practice of commercial logging (of any tree age) may harm the old growth forest ecosystem. Surely enough timber can be procured to meet human needs by logging plantations and other forests that were already degraded by logging, rather than continuing to log federal old growth forests. It's understood that USFS is arguing for "treatment" of some federal old growth forests. However, the commercial exchange of trees from old growth forests unfortunately creates an incentive which may lead to harms of these forests. Let's remove the financial incentive so that any tree removal requests are carefully considered and science-backed.

7) Please do not use glyphosate or other herbicides in old growth forests. These treatments can significantly reduce the fertility of the soil and destroy valuable native plants. The soil fertility is essential. If invasive plant species need to be reduced, please use mechanical means. However, invasive plant species are often brought in by logging equipment. If logging and other forest disturbance stops in old growth, it might help diminish the new introduction of additional invasive plants. The rich native understory makes up an important part of the old growth forest. It's not enough just to leave the oldest, biggest trees - let's also keep the rich native understories, the downed wood, the diverse trees of many species and ages, the young baby trees naturally regrowing.

8) It's important that additional protections from commercial logging be extended to mature, future-old growth forests on federal land as well, including forests known as "legacy" forests. It is beyond the scope of this letter to define these protections, but please consider this: there are very few old growth forests left, and many more "future old growth" or "legacy" forests. These forests could provide havens for biodiversity and habitat, and if not commercially logged, they could continue to store and sequester more carbon in their trees and soils.

9) It's important that ZERO old growth forests and trees are logged to produce wood pellets that will be shipped overseas and burned for energy. Forest biomass energy is not clean, it's highly polluting for local communities. Additionally, forest biomass energy is NOT carbon neutral. It is

also not financially viable - it requires huge subsidies to continue. Funding a large west coast forest biomass industry will create additional incentives to log unsustainably.

Closing

All parts of the system need to line up to make a change. (Goals, Structures, Processes/Systems, People and Metrics/Rewards). If USFS and BLM continue the unyielding, incessant timber cut targets, it will continue to put loyal and committed USFS employees in a difficult position. They want the forests they love to thrive - otherwise why else would they have committed their lives to this demanding public job? If we are to protect old growth trees and forests, we will need to line up the incentive system to exclude these old trees and forests from the count. Leaders and partners will need to think about how to make changes in a way that also supports and includes the people who work on these lands.

Sincerely, Kristen Lee